3.2.4 Middle Potomac Group Summary

3.2.4.1 Bull Neck Run Watershed

Description. Bull Neck Run Watershed is one of the smaller watersheds in Fairfax County, with just under 5 miles of stream assessed. It consists of a small stream network that drains directly to the Potomac River.

Habitat. The habitat assessment results for Bull Neck Run Watershed are summarized by stream in Table 3-15. Habitat scores for each reach are depicted in Figure 3-24. Based on a length weighted habitat score of 128 (Table 3-2), Bull Neck Run Watershed is one of the highest quality streams, compared to the rest of the County. Just over 3 miles of stream were categorized as having "fair" habitat conditions, 1 mile as "good," and 1 mile as "excellent."

CEM. Based on the CEM evaluations the channels in Bull Neck Run Watershed are divided nearly equally between Stage 3 and Stage 4 (Table 3-3). Figure 3-25 summarizes the CEM results for Bull Neck Run Watershed.

Infrastructure. The infrastructure inventory resulted in 25 inventory points. The most significant problems were related to two erosional areas that were each given an impact score of 7. The infrastructure inventory results are summarized in Table 3-16. Figures 3-26, 3-27, 3-28, 3-29, and 3-30 summarize impact scores for the erosion problems; deficient buffers; pipes/ditches; crossings; and dumps, obstructions, and utilities, respectively.

3.2.4.2 Scotts Run Watershed

Description. Scotts Run Watershed is a small watershed, with approximately 8 miles of stream assessed. It is located in the middle of the northeastern boundary of the County. The watershed is contained entirely within the county boundaries, and drains directly to the Potomac River.

Habitat. The habitat assessment results for Scotts Run Watershed are summarized by stream in Table 3-17. Habitat scores for each reach are depicted in Figure 3-24. Based on a length weighted habitat score of 108 (Table 3-2), Scotts Run Watershed is in the middle range of quality, compared to the rest of the County. Approximately 4 miles of stream were categorized as having "poor" habitat conditions, 2.5 miles as "fair," and 0.5 miles as "good," and 1.5 miles as "excellent."

CEM. On the basis of the CEM evaluations 89 percent of the channels in Scotts Run Watershed are in Evolutionary Stage 3 (Table 3-3). Figure 3-25 summarizes the CEM results for Scotts Run Watershed.

Infrastructure. The infrastructure inventory resulted in 78 inventory points. The most significant problem was related to a crossing that was given an impact score of 8. The infrastructure inventory results are summarized in Table 3-18. Figures 3-26, 3-27, 3-28, 3-29, and 3-30 summarize impact scores for the erosion problems; deficient buffers; pipes/ditches; crossings; and dumps, obstructions, and utilities, respectively.

3.2.4.3 Dead Run Watershed

Description. Dead Run Watershed is one of the smaller watersheds in Fairfax County, with approximately 6 miles of stream assessed. It consists of a small stream network that drains directly to the Potomac River at the north end of the County.

Habitat. The habitat assessment results for Dead Run Watershed are summarized by stream in Table 3-19. Habitat scores for each reach are depicted in Figure 3-24. Based on a length weighted habitat score of 103 (Table 3-2), Dead Run Watershed is in the middle range of quality, compared to the rest of the County. Approximately 3 miles of stream were categorized as having "poor" habitat conditions and 3 miles as "fair."

CEM. On the basis of CEM evaluations, all of the channels in Dead Run Watershed are in Stage 3 (Table 3-3). Figure 3-25 summarizes the CEM results for Dead Run Watershed.

Infrastructure. The infrastructure inventory resulted in 49 inventory points. The most significant problems were related to two deficient buffers that were each given an impact score of 7. The infrastructure inventory results are summarized in Table 3-20. Figures 3-26, 3-27, 3-28, 3-29, and 3-30 summarize impact scores for the erosion problems; deficient buffers; pipes/ditches; crossings; and dumps, obstructions, and utilities, respectively.

3.2.4.4 Turkey Run Watershed

Description. Turkey Run Watershed is a small watershed, with approximately 3 miles of stream assessed. It is located along the middle of the northeastern boundary of the County. The watershed consists of a couple small tributaries that drain directly to the Potomac River.

Habitat. The habitat assessment results for Turkey Run Watershed are summarized by stream in Table 3-21. Habitat scores for each reach are depicted in Figure 3-24. Based on a length weighted habitat score of 124 (Table 3-2), Turkey Run Watershed is one of the highest quality watersheds in the County. Approximately 1 mile of stream was categorized as having "poor" habitat conditions, and 2 miles as "good."

CEM. On the basis of the CEM evaluations all of the channels assessed in Turkey Run Watershed are in Evolutionary Stage 3 (Table 3-3). Figure 3-25 summarizes the CEM results for Turkey Run Watershed.

Infrastructure. The infrastructure inventory resulted in 21 inventory points. The most significant problem was related to an erosional area that was given an impact score of 7. The infrastructure inventory results are summarized in Table 3-22. Figures 3-26, 3-27, 3-28, 3-29, and 3-30 summarize impact scores for the erosion problems; deficient buffers; pipes/ditches; crossings; and dumps, obstructions, and utilities, respectively.

3.2.4.5 Pimmit Run Watershed

Description. Pimmit Run Watershed is a medium sized watershed, with approximately 19 miles of stream assessed. It is located in the middle of the northeastern boundary of the County. The watershed is contained entirely within the county boundaries, and drains directly to the Potomac River.

Habitat. The habitat assessment results for Pimmit Run Watershed are summarized by stream in Table 3-23. Habitat scores for each reach are depicted in Figure 3-24. Based on a

length weighted habitat score of 118 (Table 3-2), Pimmit Run Watershed is in the upper middle range, compared to the rest of the County. Approximately 2 miles of stream were categorized as having "poor" habitat conditions, 8.5 miles as "fair," and 7 miles as "good" and 0 miles as "excellent."

CEM. Based on the CEM evaluations approximately 80 percent of the channels in Pimmit Run Watershed are in Evolutionary Stage 3 with the most of the remainder in Stage 4 (Table 3-3). Figure 3-25 summarizes the CEM results for Pimmit Run Watershed.

Infrastructure. The infrastructure inventory resulted in 272 inventory points. The most significant problems were related to 2 deficient buffers that were given impact scores of 9 and 10. The infrastructure inventory results are summarized in Table 3-24. Figures 3-26, 3-27, 3-28, 3-29, and 3-30 summarize impact scores for the erosion problems; deficient buffers; pipes/ditches; crossings; and dumps, obstructions, and utilities, respectively.

TABLE 3-15
Habitat Assessment Summary for Bull Neck Run Watershed
Fairfax County Stream Physical Assessment

	Linear Feet (Percent) of Stream					
Stream	**Very Poor**	**Poor**	**Fair**	**Good**	**Excellent**	**Total**
Bull Neck Run	0 (0.00)	0 (0.00)	10,005 (100.00	0 (0.00)	0 (0.00)	10,005
Tributary to Bull Neck Run	0 (0.00)	0 (0.00)	6,394 (55.51)	0 (0.00)	5,125 (44.49)	11,519
Tributary to Potomac River	0 (0.00)	0 (0.00)	0 (0.00)	3,798 (100.00)	0 (0.00)	3,798
Watershed Total	**0 (0.00)**	**0 (0.00)**	**16,399 (64.76)**	**3,798 (15.00)**	**5,125 (20.24)**	**25,323**

TABLE 3-16
Infrastructure Assessment Summary for Bull Neck Run Watershed
Fairfax County Stream Physical Assessment

Impact Score	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**>10**	**Total**
Deficient Buffers	0	0	0	4	1	0	0	0	0	0	0	N/A	5
Crossings	0	8	2	2	1	0	0	0	0	0	0	N/A	13
Ditches and Pipes	0	0	0	0	1	0	0	0	0	0	0	N/A	1
Erosion	0	0	0	0	0	1	0	2	0	0	0	N/A	3
Head Cut	0	0	0	0	0	0	0	0	0	0	0	N/A	0
Obstruction	0	0	0	2	1	0	0	0	0	0	0	N/A	3
Utility	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**8**	**2**	**8**	**4**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**25**

TABLE 3-17
Habitat Assessment Summary for Scotts Run Watershed
Fairfax County Stream Physical Assessment

	Linear Feet (Percent) of Stream					
Stream	**Very Poor**	**Poor**	**Fair**	**Good**	**Excellent**	**Total**
Bradley Branch	0 (0.00)	3,647 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	3,647
Scott Run	0 (0.00)	7,088 (31.02)	5,370 (23.50)	2,726 (11.93)	7,664 (33.54)	22,848
Tributary to Scott Run	0 (0.00)	8,824 (51.76)	8,224 (48.24)	0 (0.00)	0 (0.00)	17,049
Watershed Total	0 (0.00)	19,559 (44.92)	13,594 (31.22)	2,726 (6.26)	7,664 (17.60)	43,543

TABLE 3-18
Infrastructure Assessment Summary for Scotts Run Watershed
Fairfax County Stream Physical Assessment

Impact Score	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**>10**	**Total**
Deficient Buffers	0	0	1	4	5	3	1	0	0	0	0	N/A	14
Crossings	0	12	9	9	3	0	0	0	1	0	0	N/A	34
Ditches and Pipes	1	1	0	3	2	0	0	0	0	0	0	N/A	7
Erosion	0	0	0	8	4	3	0	0	0	0	0	N/A	15
Head Cut	0	0	0	0	0	0	0	0	0	0	0	N/A	0
Obstruction	0	0	1	2	2	1	0	0	0	0	0	N/A	6
Utility	0	0	0	2	0	0	0	0	0	0	0	0	2
Total	**1**	**13**	**11**	**28**	**16**	**7**	**1**	**0**	**1**	**0**	**0**	**0**	**78**

TABLE 3-19
Habitat Assessment Summary for Dead Run Watershed
Fairfax County Stream Physical Assessment

	Linear Feet (Percent) of Stream					
Stream	**Very Poor**	**Poor**	**Fair**	**Good**	**Excellent**	**Total**
Dead Run	0 (0.00)	0 (0.00)	13,154 (92.25)	0 (0.00)	1,105 (7.75)	14,260
Tributary to Dead Run	0 (0.00)	15,057 (92.54)	1,214 (7.46)	0 (0.00)	0 (0.00)	16,271
Tributary to Potomac River	0 (0.00)	0 (0.00)	0 (0.00)	1,087 (100.00	0 (0.00)	1,087
Watershed Total	**0 (0.00)**	**15,057 (47.62)**	**14,368 (45.44)**	**1,087 (3.44)**	**1,105 (3.50)**	**31,618**

TABLE 3-20
Infrastructure Assessment Summary for Dead Run Watershed
Fairfax County Stream Physical Assessment

Impact Score	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**>10**	**Total**
Deficient Buffers	0	0	0	5	6	1	0	2	0	0	0	N/A	14
Crossings	1	12	8	2	1	0	0	0	0	0	0	N/A	24
Ditches and Pipes	0	1	2	1	0	0	0	0	0	0	0	N/A	4
Erosion	0	0	0	0	0	2	1	0	0	0	0	N/A	3
Head Cut	0	0	0	0	0	0	0	0	0	0	0	N/A	0
Obstruction	0	0	0	0	1	1	0	0	0	0	0	N/A	2
Utility	0	0	0	0	0	0	2	0	0	0	0	0	2
Total	**1**	**13**	**10**	**8**	**8**	**4**	**3**	**2**	**0**	**0**	**0**	**0**	**49**

TABLE 3-21
Habitat Assessment Summary for Turkey Run Watershed
Fairfax County Stream Physical Assessment

	Linear Feet (Percent) of Stream					
Stream	**Very Poor**	**Poor**	**Fair**	**Good**	**Excellent**	**Total**
Tributary to Turkey Run	0 (0.00)	5,590 (93.55)	385 (6.45)	0 (0.00)	0 (0.00)	5,975
Turkey Run	0 (0.00)	0 (0.00)	0 (0.00)	8,801 (100.00)	0 (0.00)	8,801
Watershed Total	**0 (0.00)**	**5,590 (37.83)**	**385 (2.61)**	**8,801 (59.56)**	**0 (0.00)**	**14,777**

TABLE 3-22
Infrastructure Assessment Summary for Turkey Run Watershed
Fairfax County Stream Physical Assessment

Impact Score	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**>10**	**Total**
Deficient Buffers	0	0	0	0	4	3	0	0	0	0	0	N/A	7
Crossings	0	1	2	3	1	0	0	0	0	0	0	N/A	7
Ditches and Pipes	0	0	1	0	0	0	0	0	0	0	0	N/A	1
Erosion	0	0	0	0	2	1	0	1	0	0	0	N/A	4
Head Cut	0	0	0	0	0	0	0	0	0	0	0	N/A	0
Obstruction	0	0	0	2	0	0	0	0	0	0	0	N/A	2
Utility	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**1**	**3**	**5**	**7**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**21**

TABLE 3-23
Habitat Assessment Summary for Pimmit Run Watershed
Fairfax County Stream Physical Assessment

	Linear Feet (Percent) of Stream					
Stream	**Very Poor**	**Poor**	**Fair**	**Good**	**Excellent**	**Total**
Bryan Branch	0 (0.00)	0 (0.00)	4,078 (100.00	0 (0.00)	0 (0.00)	4,078
Burkes Spring Branch	0 (0.00)	3,578 (100.00	0 (0.00)	0 (0.00)	0 (0.00)	3,578
Little Pimmit Run	0 (0.00)	596 (4.63)	12,267 (95.37)	0 (0.00)	0 (0.00)	12,863
Pimmit Run	0 (0.00)	4,280 (8.82)	10,057 (20.71)	34,217 (70.47)	0 (0.00)	48,554
Tributary to Pimmit Run	0 (0.00)	3,024 (11.68)	18,915 (73.05)	3,954 (15.27)	0 (0.00)	25,893
Watershed Total	**0 (0.00)**	**11,478 (12.09)**	**45,316 (47.72)**	**38,172 (40.19)**	**0 (0.00)**	**94,966**

TABLE 3-24
Infrastructure Assessment Summary for Pimmit Run Watershed
Fairfax County Stream Physical Assessment

Impact Score	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**>10**	**Total**
Deficient Buffers	0	0	0	7	12	43	14	2	0	1	1	N/A	80
Crossings	17	45	6	4	1	0	0	1	0	0	0	N/A	74
Ditches and Pipes	110	0	1	0	1	0	0	0	0	0	0	N/A	112
Erosion	0	0	0	0	0	0	0	0	0	0	0	N/A	0
Head Cut	0	0	0	0	0	0	0	0	0	0	0	N/A	0
Obstruction	0	0	1	1	1	0	1	0	0	0	0	N/A	4
Utility	0	0	0	0	0	0	1	0	1	0	0	0	2
Total	**127**	**45**	**8**	**12**	**15**	**43**	**16**	**3**	**1**	**1**	**1**	**0**	**272**

BULL NECK RUN

SCOTTS RUN

DEAD RUN

TURKEY RUN

PIMMIT RUN

Fairfax County Boundary

Habitat Rating

Excellent

Good

Fair

Poor

Very Poor

No Habitat Assessment

Lakes and Ponds

Watersheds

N

0 2000 4000 6000 8000 Feet

WATERSHED GROUP:
MIDDLE POTOMAC

Figure 3-24
Habitat Assessment
Middle Potomac Group
Fairfax County Stream Physical Assessment

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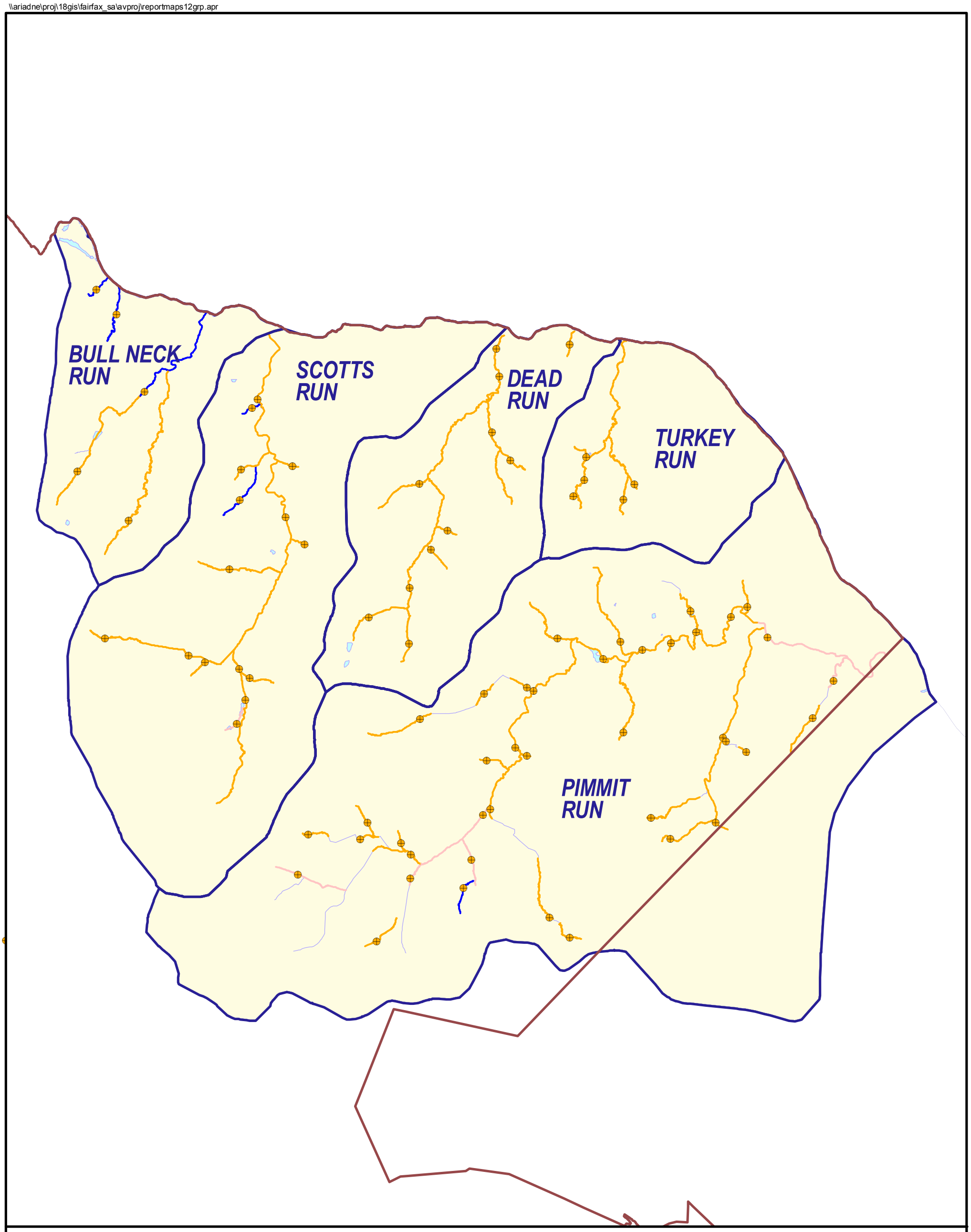

Inventory Types
- Cross Section
- Head Cut

CEM Stage
- Not Assigned
- 1
- 2
- 3
- 4
- 5
- Fairfax County Boundary
- Lakes and Ponds
- Streams
- Watersheds

N

0 2000 4000 6000 8000 Feet

WATERSHED GROUP: MIDDLE POTOMAC

Figure 3-25
CEM Stages
Middle Potomac Group
Fairfax County Stream Physical Assessment

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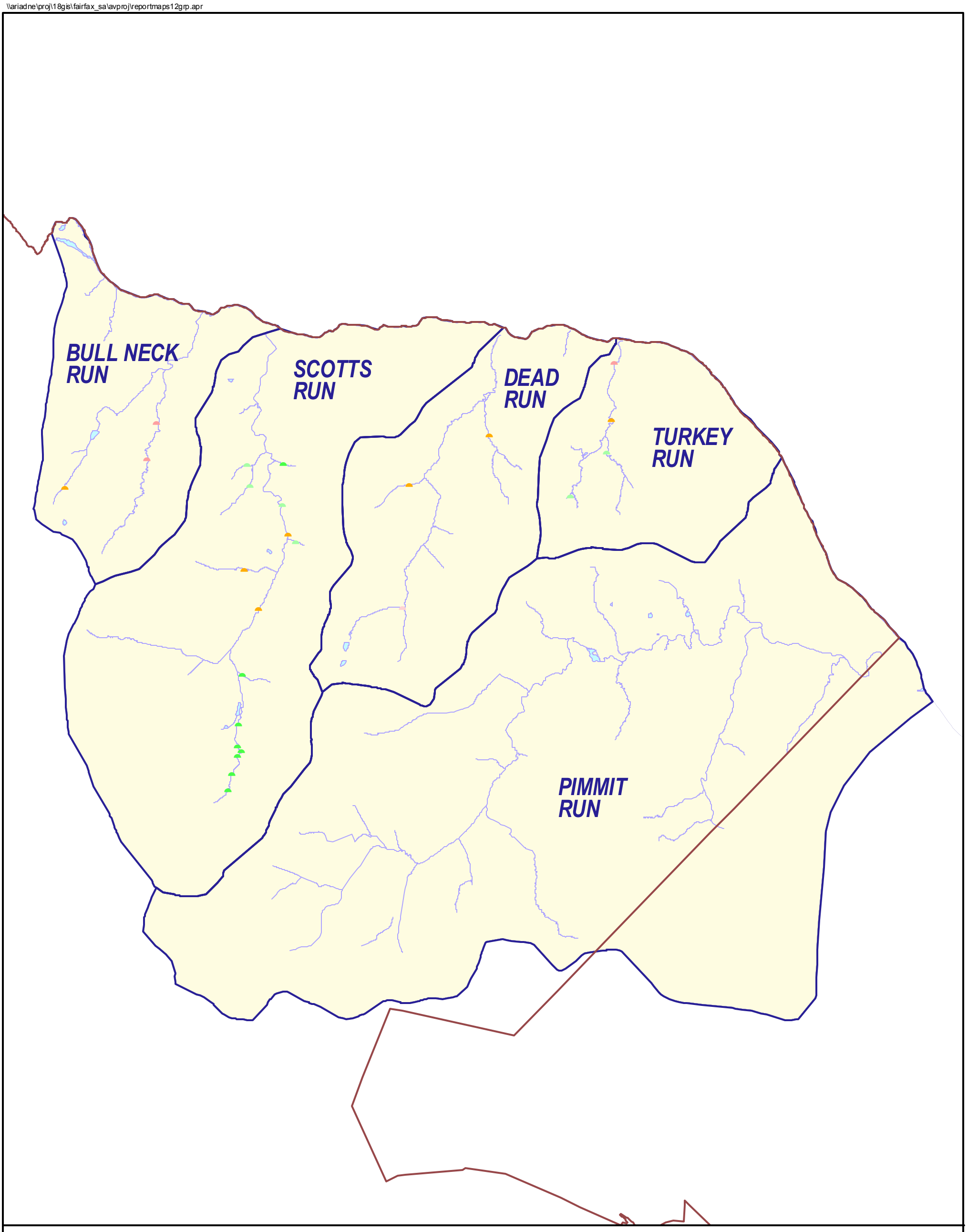

Erosion by Impact Score
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Fairfax County Boundary
Lakes and Ponds
Streams
Watersheds

WATERSHED GROUP: MIDDLE POTOMAC

N

0 2000 4000 6000 8000 Feet

CH2MHILL

Figure 3-26
Erosion Impacts
Middle Potomac Group
Fairfax County Stream Physical Assessment

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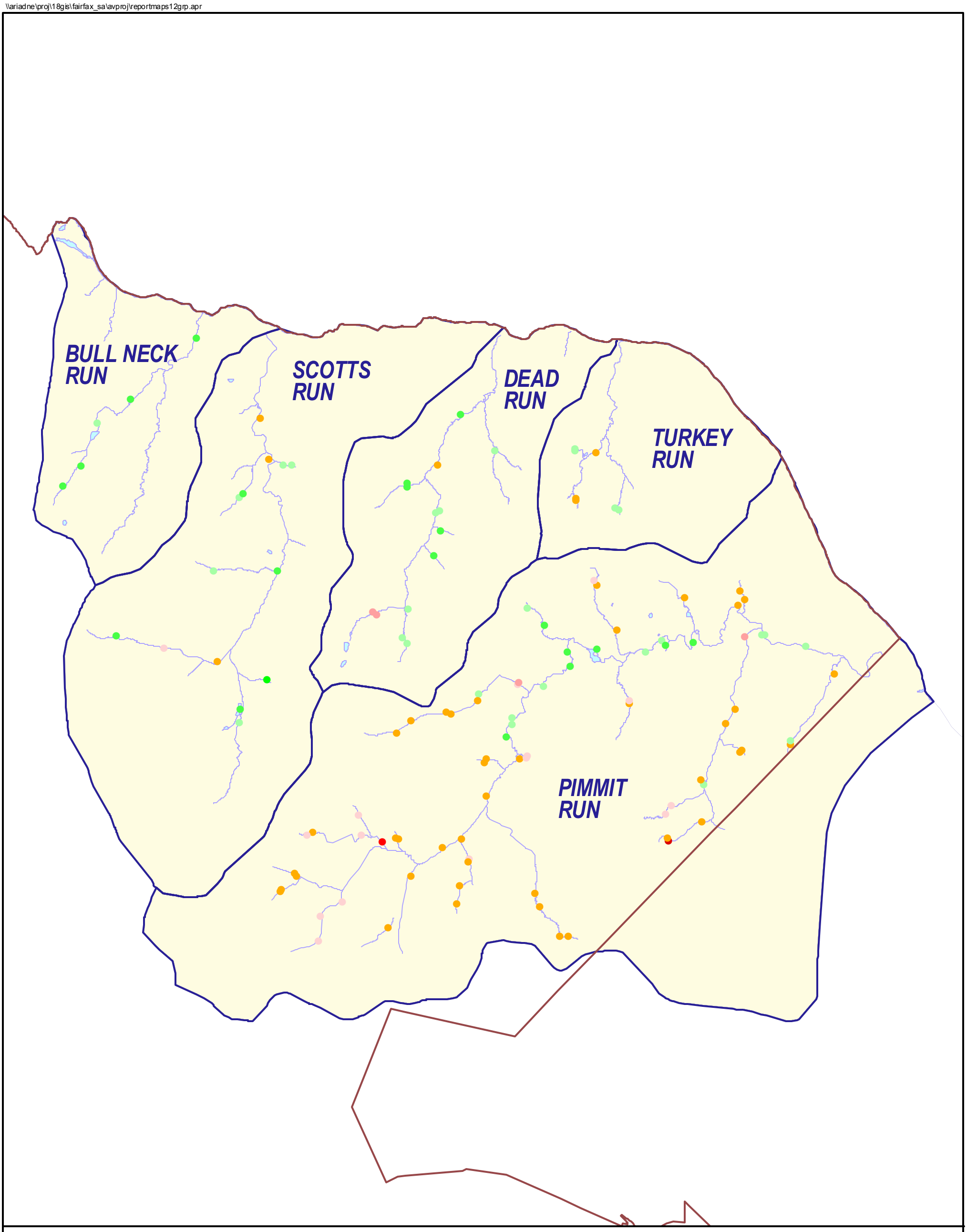

Deficient Buffer by Impact Score

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Fairfax County Boundary
Lakes and Ponds
Streams
Watersheds

WATERSHED GROUP: MIDDLE POTOMAC

N

0 2000 4000 6000 8000 Feet

Figure 3-27
Deficient Buffer Impacts
Middle Potomac Group
Fairfax County Stream Physical Assessment

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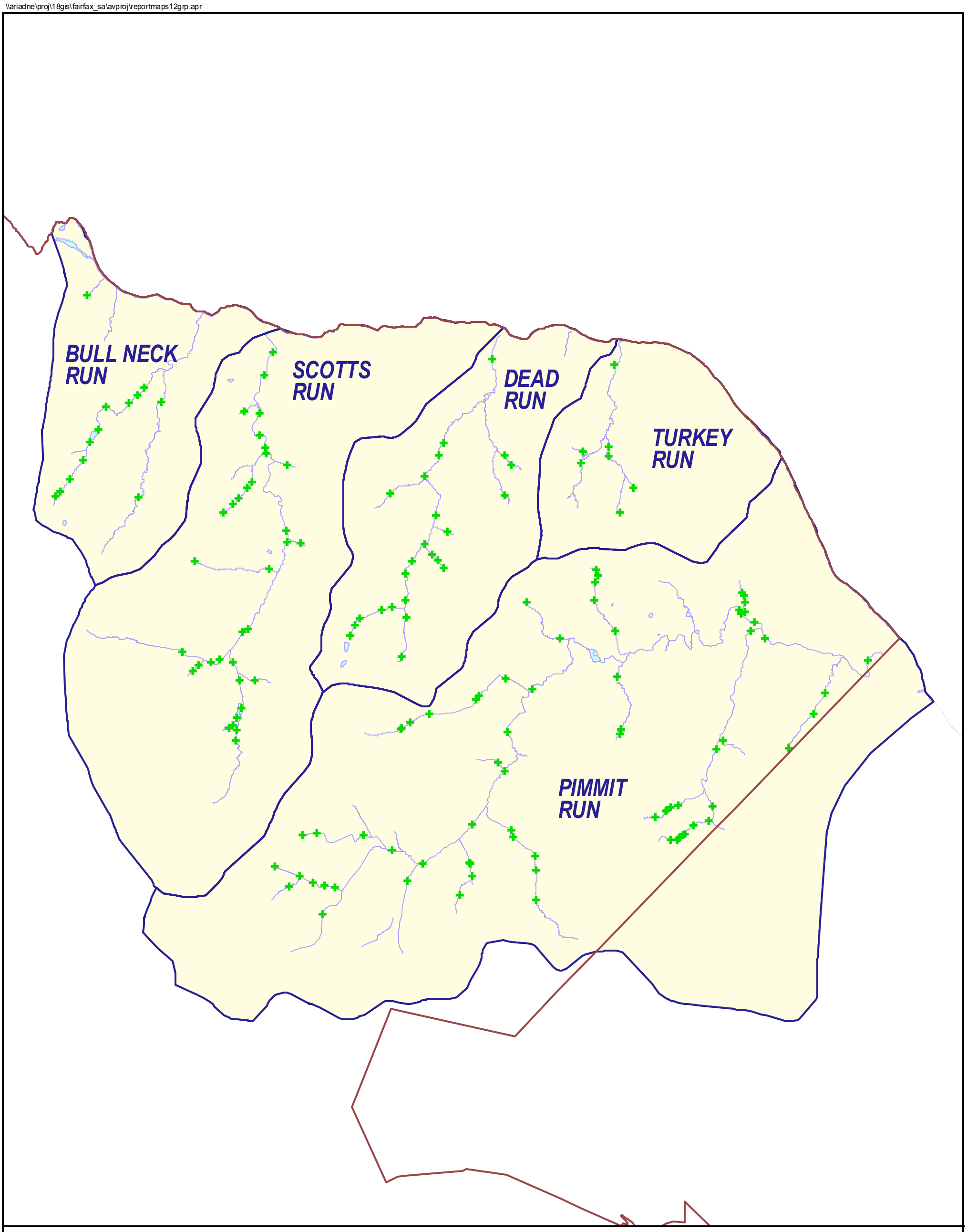

Inventory Type
+ Crossing

Fairfax County Boundary
Lakes and Ponds
Streams
Watersheds

WATERSHED GROUP:
MIDDLE POTOMAC

N

0 2000 4000 6000 8000 Feet

Figure 3-28
Crossings
Middle Potomac Group
Fairfax County Stream Physical Assessment

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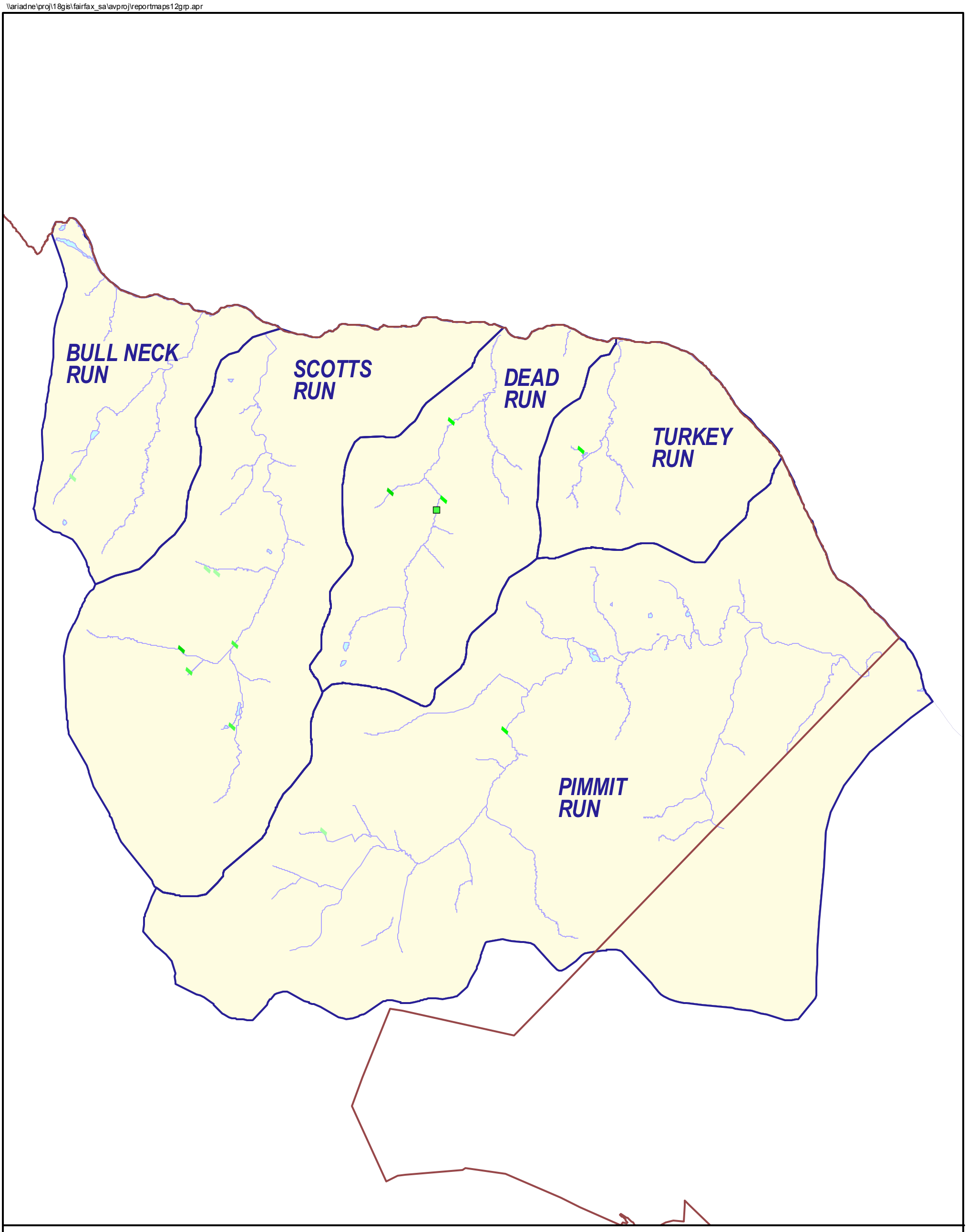

Pipe / Ditch by Impact Score

1
2
3
4
5
6
7
8
9
10

Fairfax County Boundary
Lakes and Ponds
Streams
Watersheds

WATERSHED GROUP:
MIDDLE POTOMAC

N

0 2000 4000 6000 8000 Feet

Figure 3-29
Pipe and Ditch Impacts
Middle Potomac Group
Fairfax County Stream Physical Assessment

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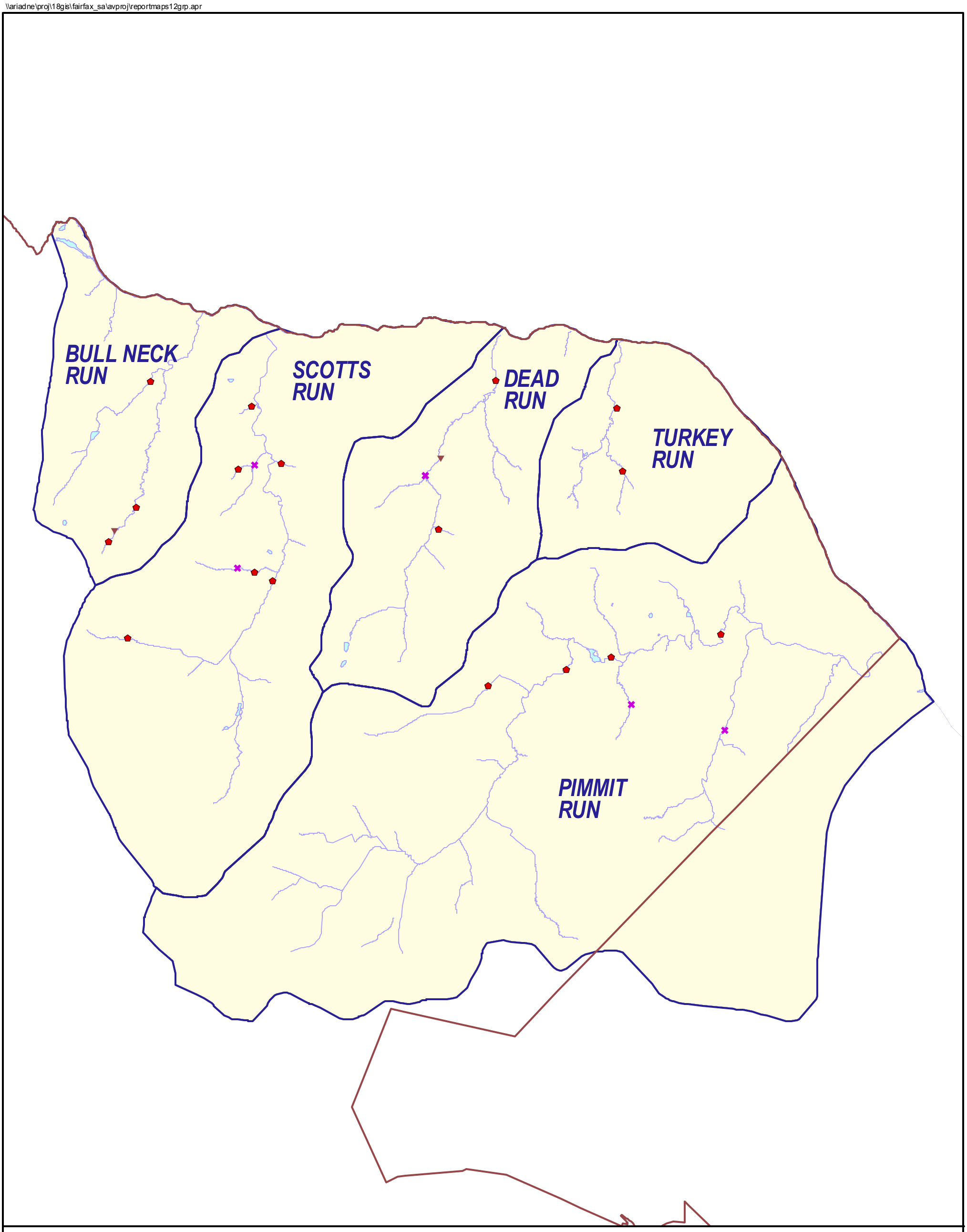

Inventory Types
- Dump
- Obstruction
- Utility

- Fairfax County Boundary
- Lakes and Ponds
- Streams
- Watersheds

WATERSHED GROUP: MIDDLE POTOMAC

N

0 2000 4000 6000 8000 Feet

Figure 3-30
Dumps, Obstructions, and Utilities
Middle Potomac Group
Fairfax County Stream Physical Assessment

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